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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,888	04/06/2001	Hisashi Hotta	003510-091	3377

7590

08/25/2004

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EXAMINER
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HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/826,888

Applicant(s)

HOTTA, HISASHI

Examiner

Cynthia Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 5/24/04, 7/9/04.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/9/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The examiner has carefully reviewed this application and found with respect to the Office Action of January 9, 2003 Paragraph 6. That she made an error in the calculation with respect to the density. The correction for units changing  $\mu\text{m}$  to m was in error. There are  $1 \times 10^6 \mu\text{m} = 1 \text{ m}$  not  $1 \times 10^9 \mu\text{m} = 1 \text{ m}$ . The paragraph at issue from the January 9, 2003 Office Action is as follows:

6. The examiner notes for the record that EP 0697282 cited by applicants discloses aluminum oxide layers of a density of a minimum of  $5000,000 \text{ kg/m}^3$ , i.e., a thickness of  $2.0 \mu\text{m}$  and  $1 \text{ g/m}^2$ , as outside ranges of defined layer to determine density. All other density values in the ranges given would be higher. The same is true of EP 0716935A and EP 0730202. The calculation used was  $(1 \text{ g/m}^2)(1/2 \mu\text{m})(1 \text{ kg}/1000 \text{ g})(1 \times 10^9 \mu\text{m}/\text{m}) = 500,000 \text{ kg/m}^3$  by this examiner. The thickest layer and lightest weight would give the least dense layer cited by the prior art. The same calculations for WO 9852743A yield  $155,000 \text{ kg/m}^3$  density. Thus, it, too, is outside the instant ranges.

Thus the calculation should be as follows:

$$(1 \text{ g/m}^2)(1/2 \mu\text{m})(1 \text{ kg}/1000 \text{ g})(1 \times 10^6 \mu\text{m}/\text{m}) = 500 \text{ kg/m}^3.$$

This is for  $(1 \text{ g/m}^2)$  and  $2 \mu\text{m}$  thickness of the lightest possible layer set forth by the ranges of EP 0697282 on page 7. The most dense layer would be  $(8 \text{ g/m}^2)$  and  $0.4 \mu\text{m}$ . The density would be as follows:

$$(8 \text{ g/m}^2)(1/0.4 \mu\text{m})(1 \text{ kg}/1000 \text{ g})(1 \times 10^6 \mu\text{m}/\text{m}) = 20,000 \text{ kg/m}^3.$$

Thus the theoretical density range of the aluminum oxide layers in EP 0697282 would be from  $500 \text{ kg/m}^3$  to  $20,000 \text{ kg/m}^3$  that overlaps the range in instant claim 1 of 1000 to  $3200 \text{ kg/m}^3$ .

This is the same for EP 0716935A and EP 0730202.

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2. In view of the examiner's miscalculation, allowance of claim 1 is withdrawn and new rejections follow based upon EP 0697282, EP 0716935A and EP 0730202.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1- 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonckheere, (EP 0 716 935). With respect to instant claims 1-5, the lithographic printing plates of Jonckheere teach all of the instant plate of claim 1 and the plate of claims 2-5 wherein the (1) option of density from 1.0 g/cm<sup>3</sup> to 3.2 g/cm<sup>3</sup> of the anodic oxidation coating is chosen with the exception of teaching the specific density range of from 1000 to 3200 kg/m<sup>3</sup>, i.e. 1.0 g/cm<sup>3</sup> to 3.2 g/cm<sup>3</sup>, and an example using the infrared lasers for imaging. However, Jonckheere teaches the formation of their plates for use in imaging with near infra-red lasers on page 6, lines 31-35, and the range of layer thickness, i.e. 0.4 to 2.0 µm in last paragraph on page 3 of Jonckheere, and anodized film weight of 1-8 g/m<sup>2</sup> in the paragraph in Jonckheere bridging pages 5-6. Thus, with respect to instant claims 1-5, the plates of Jonckheere make prima facie the instant plates

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wherein the theoretical density range of the anodic oxide layer in Jonckheere of 500 kg/m<sup>3</sup> to 20,000 kg/m<sup>3</sup> overlaps the instant range. The calculation should be as follows:

$$(1 \text{ g/m}^2)(1/2 \text{ }\mu\text{m})(1 \text{ kg/1000g})(1 \times 10^6 \text{ }\mu\text{m/m}) = 500 \text{ kg/m}^3.$$

This is for (1 g/m<sup>2</sup>) and 2  $\mu$ m thickness of the lightest possible layer set forth by the ranges of EP 0697282 on page 7. The most dense layer would be (8 g/m<sup>2</sup>) and 0.4  $\mu$ m. The density would be as follows:

$$(8 \text{ g/m}^2)(1/0.4 \text{ }\mu\text{m})(1 \text{ kg/1000g})(1 \times 10^6 \text{ }\mu\text{m/m}) = 20,000 \text{ kg/m}^3.$$

The one plate in Example 1 of Jonckheere has no thickness given but when calculated within the range of thickness range disclosed has 1,300 to 6,500 kg/m<sup>3</sup> range of possible density.

This range also overlaps the instant range claimed. In the case where the claimed ranges

“overlap or lie inside ranges disclosed by the prior art” a *prima facie* case of obviousness exists.

*In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 UAPQ2d 1934 (Fed. Cir. 1990). See particularly MPEP 2144.05.

5. Claims 1- 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Jaeger et al (EP 0 730 202 A2). With respect to instant claims 1-5, the lithographic printing plates of de Jaeger et al teach all of the instant plate of claim 1 and the plate of claims 2-5 wherein the (1) option of density from 1.0 g/cm<sup>3</sup> to 3.2 g/cm<sup>3</sup> of the anodic oxidation coating is chosen with the exception of teaching the specific density range of from 1000 to 3200 kg/m<sup>3</sup>, i.e. 1.0 g/cm<sup>3</sup> to 3.2 g/cm<sup>3</sup>, and an example using the infrared lasers for imaging. However, de Jaeger et al teaches the formation of their plates for use in imaging with near infra-red lasers on page 9, lines 33-37, and the range of layer thickness, i.e. 0.4 to 2.0  $\mu$ m in second paragraph on page 7 of de Jaeger et al, and anodized film weight of 1-8 g/m<sup>2</sup> in the first paragraph in de Jaeger et al of page 8.

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Thus, with respect to instant claims 1-5, the plates of de Jaeger et al make prima facie the instant plates wherein the theoretical density range of the anodic oxide layer in Jonckheere of 500 kg/m<sup>3</sup> to 20,000 kg/m<sup>3</sup> overlaps the instant range. The calculation should be as follows:

$$(1 \text{ g/m}^2)(1/2 \text{ }\mu\text{m})(1 \text{ kg}/1000\text{g})(1 \times 10^6 \text{ }\mu\text{m}/\text{m}) = 500 \text{ kg/m}^3.$$

This is for (1 g/m<sup>2</sup>) and 2 μm thickness of the lightest possible layer set forth by the ranges of de Jaeger et al. The most dense layer would be 8 g/m<sup>2</sup> and 0.4 μm. The density would be as follows:

$$(8 \text{ g/m}^2)(1/0.4 \text{ }\mu\text{m})(1 \text{ kg}/1000\text{g})(1 \times 10^6 \text{ }\mu\text{m}/\text{m}) = 20,000 \text{ kg/m}^3.$$

The one plate in Example 1 of de Jaeger et al has no thickness given but when calculated within the range of thickness range disclosed has 1,300 to 6,500 20,000 kg/m<sup>3</sup> range of possible density.

This range also overlaps the instant range claimed. In the case where the claimed ranges

“overlap or lie inside ranges disclosed by the prior art” a *prima facie* case of obviousness exists.

*In re Werthheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 UAPQ2d 1934 (Fed. Cir. 1990). See particularly MPEP 2144.05.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 2, applicants have added back “wherein a contact angle of a non-image area of the anodic oxidation coating after a developing process is not more than 20 degrees. As set forth in the Office Action of 7/21/2003, this property is confusing because the plate claimed

is a recording layer writeable by laser exposure but the property of a contact angle of "a non-image area" after a developing process is directed a different plate, i.e. the plate after non-specified development steps. Because there is no process relationship between the plate claimed and the intended property of the imaged plate of (ii), the properties set forth are not clearly linked to any formation on the plate claimed. Thus, it is not clear how the plate that is imageable becomes the plate imaged with the required contact angle. Thus, it is not clear if the property contact angle here is limited to intended use or is an actual limit that results from the inherent structure of the plate before it is imaged and developed. Thus, claims 2-21 are held confusing.

8. Because of the removal of allowability of claim 1, this action is not made final.

9. Jaeger et al (5,633, 115) is essentially the same document as EP 0730 202 A2 thus a duplicate rejection is not made.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331.

The examiner can normally be reached on Monday through Friday 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cynthia Hamilton  
Primary Examiner  
Art Unit 1752

August 23, 2004

CYNTHIA HAMILTON  
PRIMARY EXAMINER